Claims

[c1] A method for installing an ignition module for a flame burner to an electrical system, the electrical system including a phase conductor, a neutral conductor and a ground conductor, the burner connected to the ground conductor, the ignition module including first and second inputs and at least one output, said method comprising:
connecting the phase conductor to the first input of the ignition module; and
connecting the ground conductor to the second input of the ignition module.

[c2] A method in accordance with Claim 1, the electrical system including a junction box, said method further comprising connecting an isolation transformer between said junction box and said ignition module.

[c3] A method in accordance with Claim 2 wherein the transformer includes a secondary winding, said method further comprising connecting the secondary winding to the first input of the ignition module and to the ground conductor.

[c4] A method in accordance with Claim 3, the transformer including a primary winding, said method further comprising connecting the primary winding to the phase conductor and the neutral conductor.

[c5] A method for installing an ignition module for a gas-fired burner to an isolation transformer of an electrical system, the isolation transformer including a primary winding and a secondary winding, the electrical system including a phase conductor, a neutral conductor and a ground conductor, the burner connected to the ground conductor, the ignition module including first and second inputs and at least one output, said method comprising:
connecting the transformer secondary winding to the first input of the ignition module;
connecting the transformer secondary winding to the ground conductor; and
connecting the second input of the ignition module to the ground conductor.

[c6] A method in accordance with Claim 5 further comprising connecting the primary winding to the phase conductor and the neutral conductor.

[c7] An ignition system comprising:
a burner for producing a flame;

a power supply;

an electrical system comprising a ground conductor; and

an ignition module comprising a first input, a second input, and an output, said output operatively coupled to said burner, one of said inputs coupled to said ground conductor, the other of said inputs coupled to said power supply.

[c8] An ignition system in accordance with Claim 7 further comprising an isolation transformer connected between said power supply and said ignition module.

[c9] An ignition system in accordance with Claim 8, said isolation transformer comprising a secondary winding, said secondary winding connected to said first input of said ignition module and connected to said ground conductor.

[c10] An ignition system in accordance with Claim 9, said transformer comprising a primary winding, said electrical system further comprising a phase conductor and neutral conductor, said primary winding coupled to said phase conductor and to said neutral conductor.

[c11] An ignition system comprising:

a gas burner;

an AC power supply comprising a phase conductor and neutral conductor;

an electrical system comprising a ground conductor;

an isolation transformer comprising a primary winding and a secondary winding, said primary winding connected to said phase conductor and to said neutral conductor; and

an ignition module comprising a first input, a second input, and an output, said output operatively coupled to said burner, one of said inputs coupled to said ground conductor, the other of said inputs coupled to said secondary winding.

[c12] An ignition system in accordance with Claim 11, said secondary winding further coupled to said ground conductor.